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March 9, 2006

Ms. Joan Fleck
North Coast Regional Water Quality Control Board
5550 Skylane Boulevard, Suite A
Santa Rosa, California 95403

Subject: **Fourth Quarter 2005 Groundwater Monitoring Report**
Rotten Robbie Service Station No. 40
2515 Guerneville Road, Santa Rosa, Sonoma County, California
Apex Project No. ROB01.001

Dear Ms. Fleck:

Apex Envirotech, Inc. (Apex), has been authorized by Robinson Oil Corporation (Robinson Oil) to provide this report documenting the results of the fourth groundwater monitoring event performed on November 30, 2005. Groundwater monitoring results are provided in the attached figures and tables. Apex standard operating procedures, field data, and analytical results are provided as attachments

This report is based in part on information obtained from Robinson Oil and is subject to modification as newly acquired information warrants.

BACKGROUND

November 1991 - On-Site Technologies, Inc. (OST) prepared a Remedial Investigation/Feasibility Study report recommending soil and groundwater remediation through groundwater extraction treatment

December 15, 1995 - OST recommended a soil vapor extraction (SVE) and air sparge (AS) system be coupled with the groundwater extraction treatment as a more beneficial and cost effective remedial technology.

June 26, 1996 - OST proposed annual groundwater monitoring be conducted at the subject site, and groundwater extraction and treatment be supplemented with SVE/AS.

January 29, 1998 - The North Coast Regional Water Quality Control Board (NCRWQCB) issued a letter, requesting a feasibility study be prepared proposing alternative remediation technologies.

April 20, 1999 - ATC Associates, Inc. submitted a *Remedial Action/Feasibility Study and Corrective Action Plan*, proposing active dual phase extraction.

April 20, 2003 - Based on groundwater contamination at the subject site, the NCRWQCB proposed deferring implementation of a remediation system and continue groundwater monitoring activities.

July 24, 2004 - Apex submitted *Workplan for Installation of Ozone Sparging Remediation System*, proposing the installation of an ozone sparge system at the subject site, and other remedial alternatives.

December 3, 2004 - The NCRWQCB issued a letter recommending that the ozone sparge remediation system be permitted through the Santa Rosa Fire and Community Development Department. In addition, the NCRWQCB requested that well MW-11 from the Former Crossroads Beacon site be included in Apex's quarterly sampling schedule. The approved remediation system at the site will be installed concurrently with pending site demolition and reconstruction.

GENERAL SITE INFORMATION

Site name:	Rotten Robbie Service Station No. 40
Site address:	2515 Guerneville Road, Santa Rosa
Responsible party:	Robinson Oil Corporation
Current site use:	Fuel station
Current phase of project:	Groundwater monitoring
Tanks at site:	4 USTs
Number of wells:	7 Monitoring wells (4 onsite, 3 offsite)

GROUNDWATER MONITORING SUMMARY

Gauging and sampling date: November 30, 2005
Wells gauged and sampled: MW-1 through MW-6 and MW-8
Wells gauged only: None
Wells sampled only: None
Groundwater flow direction: South-southwest
Groundwater gradient: 0.018 ft/ft
Floating liquid hydrocarbon: None
Laboratory: Kiff Analytical, Davis, California

Analysis:

Analysis	Abbreviation	Designation	USEPA Method No.	
Total Petroleum Hydrocarbons as Gasoline	TPHg	Gas-Range Hydrocarbon	8260B	
Benzene	BTEX	Aromatic Volatile Organics		
Toluene				
Ethylbenzene				
Xylenes (Total)				
Methyl Butyl Alcohol	MTBE	Five Fuel Oxygenates		
Di-Isopropyl Ether	DIPE			
Ethyl Tertiary Butyl Ether	ETBE			
Tertiay Amyl Methyl Ether	TAME			
Tertiary Butal Alcohol	TBA	Lead Scavengers		
1,2-Dichloroethane	1,2-DCA			
Ethylene Dibromide	EDB			

Modifications from Standard Monitoring Program:

None

CONCLUSIONS

Groundwater analytical results show detectable concentrations of TPHg and BTEX at wells MW-1 and MW-5. Concentrations of MTBE were detected in all wells. Well MW-1 contained concentrations of DIPE and TBA. Wells MW-5 and MW-6 contained elevated concentrations of TBA. Well MW-6 contained concentrations of TPHg and benzene above laboratory detection limits.

Groundwater elevation increased an average of 0.78 feet compared with last quarter.

RECOMMENDATIONS

Apex recommends continued quarterly groundwater monitoring. The next sampling event is scheduled for March 2006.

ADDITIONAL ACTIVITIES PERFORMED AT SITE

Installation of the approved ozone sparge system is currently pending the demolition and reconstruction of the site. As requested, Apex is preparing a workplan to conduct a limited subsurface investigation beneath the existing dispenser area during demolition activities.

ATTACHMENTS:

Figure 1: Site Vicinity Map

Figure 2: Site Plan Map

Figure 3: Groundwater Contour Map: November 30, 2005

Figure 4: TPHg in Groundwater Isoconcentration Map: November 30, 2005

Figure 5: Benzene in Groundwater Isoconcentration Map: November 30, 2005

Figure 6: MTBE in Groundwater Isoconcentration Map: November 30, 2005

Table 1: Well Construction Details

Table 2: Groundwater Elevation Data

Table 3: Groundwater Analytical Data

Table 4: Historical Groundwater Elevation Data

Table 5: Historical Groundwater Analytical Data

Appendix A: Apex Standard Operating Procedures

Appendix B: Field Data Sheet

Appendix C: Laboratory Analytical Report and Chain of Custody Form

REPORT DISTRIBUTION

A copy of this report was submitted to:

Regulatory Oversight: Mr. Jeff Tarter
City of Santa Rosa Fire Department
955 Sonoma Avenue
Santa Rosa, California 95404
(707) 543-3500

Ms. Joan Fleck
North Coast Regional Water Quality Control Board
5550 Skylane Boulevard, Suite A
Santa Rosa, California 95403
(707) 576-2220

Responsible Party: Mr. Thomas L. Robinson

cc: Mr. Brian Wingard

Mr. Ron Nicholson

REMARKS/SIGNATURES

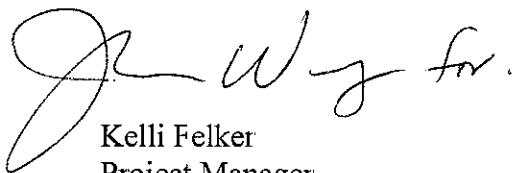
The information contained within this report reflects our professional opinions and was developed in accordance with currently available information, and accepted hydrogeologic and engineering practices.

The work described above was performed under the direct supervision of the professional geologist, registered with the State of California, whose signature appears below.

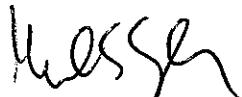
We appreciate the opportunity to provide Robinson Oil geologic, engineering and environmental consulting services, and trust this report meets your needs. If you have any questions or comments, please call us at (916) 851-0174.

Sincerely,

APEX ENVIROTECH, INC.



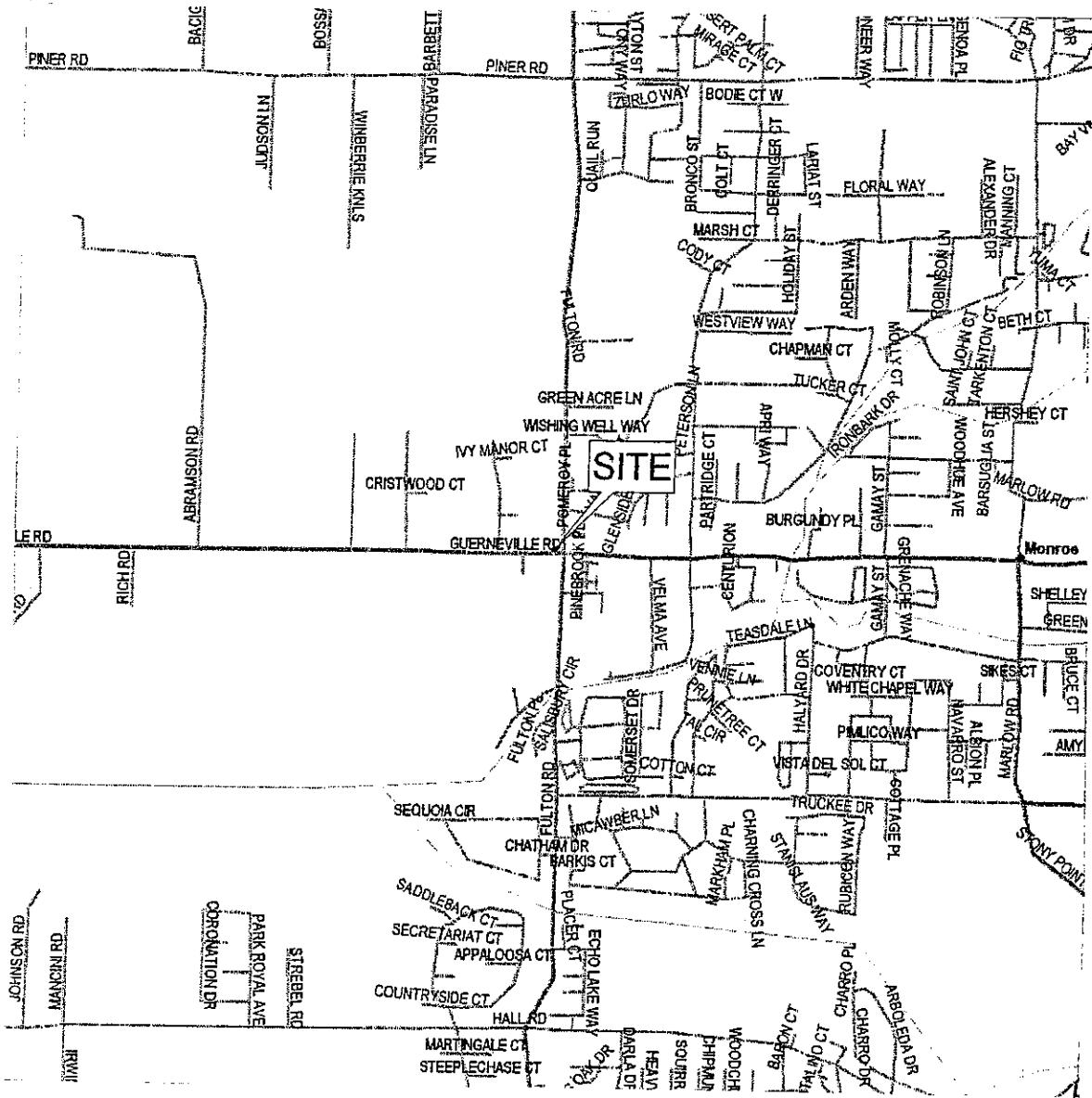
Kelli Felker
Project Manager



Michael S. Sgourakis P G.
Senior Project Manager
CPG No 7194



FIGURES



0 2,000 4,000

Approximate Scale
1 inch = 2,000 feet

N

DRAWN BY: J. Curry
DATE: 05/11/05

REVISIONS

SITE VICINITY MAP

Rotten Robbies
2515 Guerneville Road
Santa Rosa, California

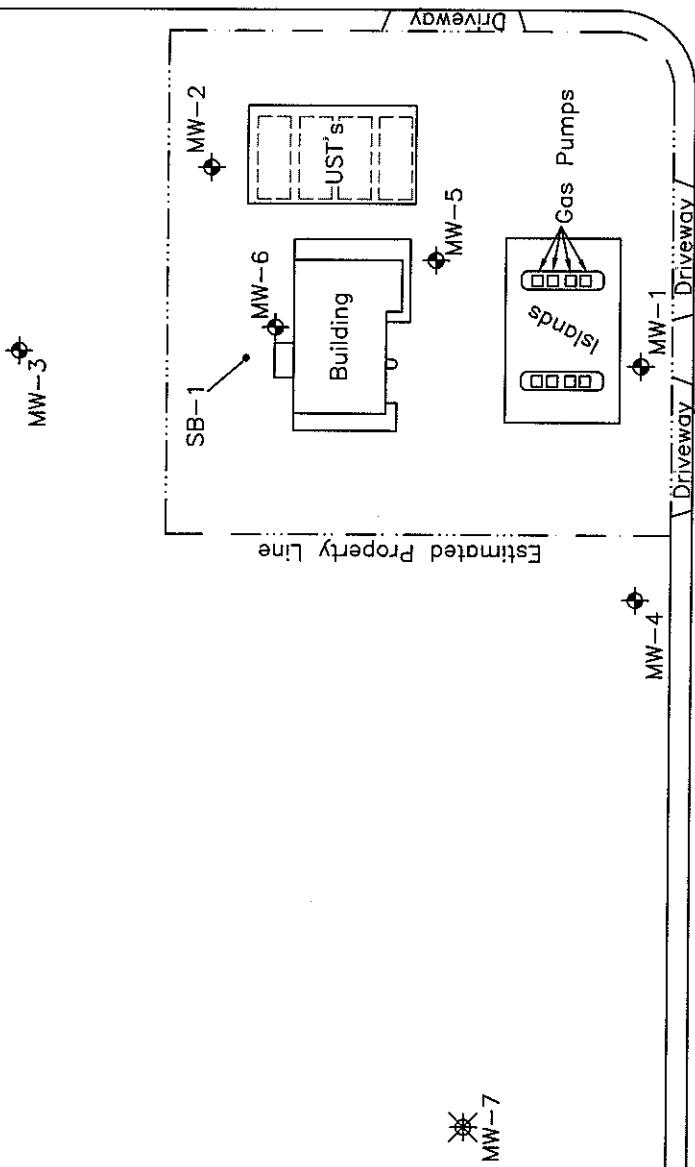
FIGURE

1

PROJECT NUMBER:
ROB01.001



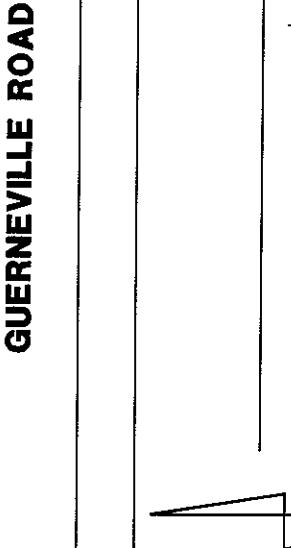
FULTON ROAD



GUERNEVILLE ROAD

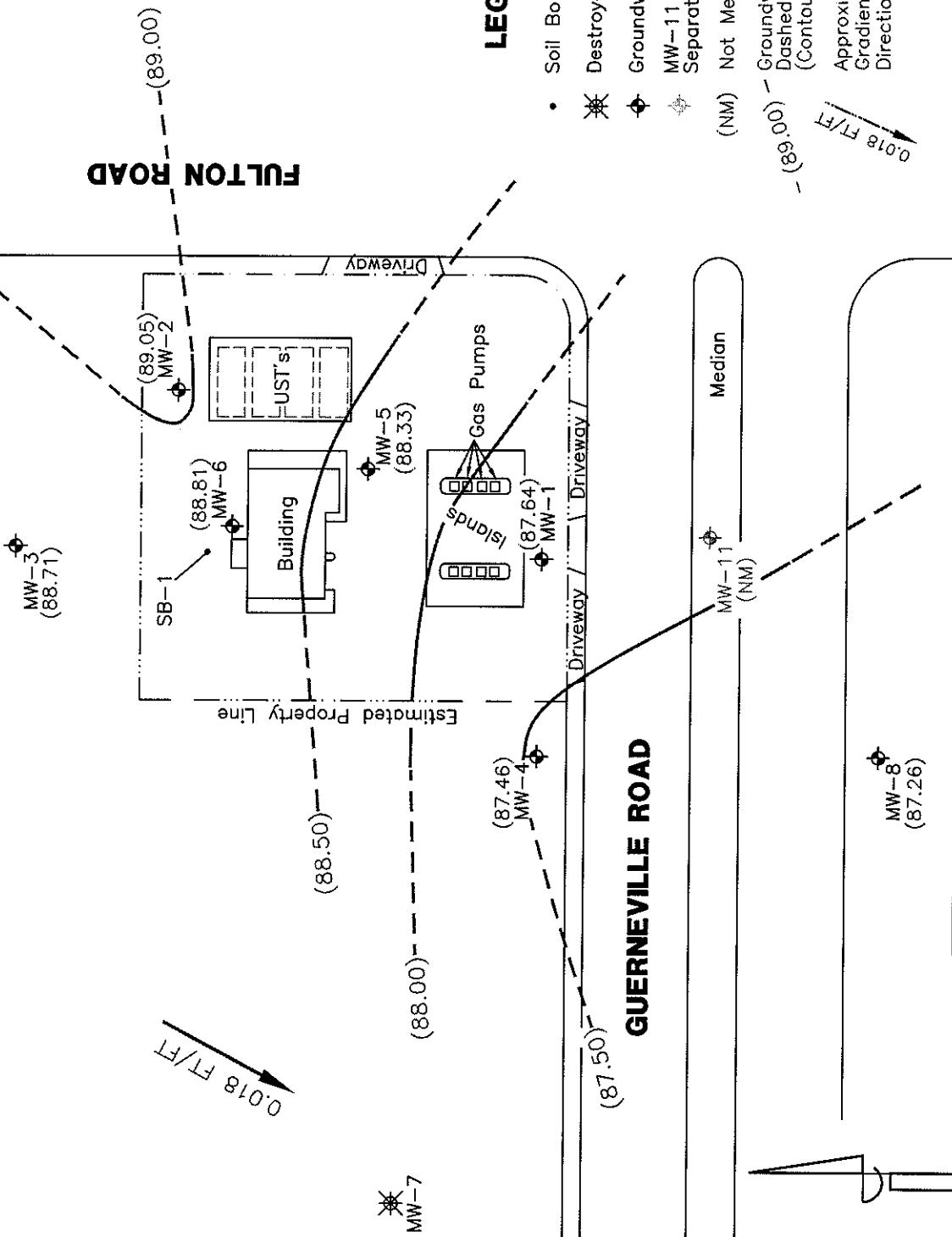
LEGEND

- Soil Boring Location
- ✗ Destroyed Monitoring Well
- ❖ Groundwater Monitoring Well
- ◆ MW-11 Is Related To A Separate UST Release



SITE PLAN MAP		FIGURE								
<table border="1"> <tr> <td>DRAWN BY: J. Curry</td> <td>REVISIONS</td> </tr> <tr> <td>DATE: 2/1/06</td> <td></td> </tr> <tr> <td colspan="2">APEX</td> </tr> <tr> <td colspan="2">ENVIROTECH, INC.</td> </tr> </table>		DRAWN BY: J. Curry	REVISIONS	DATE: 2/1/06		APEX		ENVIROTECH, INC.		2
DRAWN BY: J. Curry	REVISIONS									
DATE: 2/1/06										
APEX										
ENVIROTECH, INC.										
		PROJECT NUMBER: ROB01.001								
 Approximate Scale 1 inch = 20 feet										

FULTON ROAD



**GROUNDWATER CONTOUR
MAP, NOVEMBER 30, 2005**

**FIGURE
3**

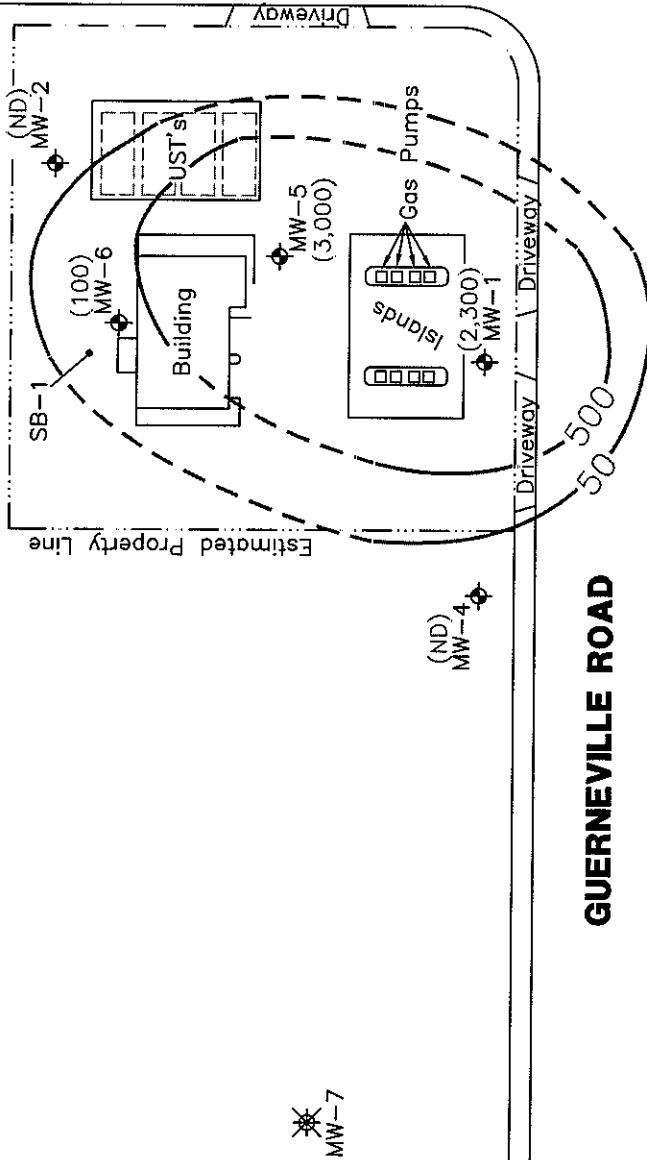
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REVISIONS	



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40
20
0
Approximate Scale
1 inch = 20 feet

FULTON ROAD



TPHg IN GROUNDWATER ISOCONCENTRATION MAP, NOVEMBER 30, 2005

FIGURE
4

PROJECT NUMBER:
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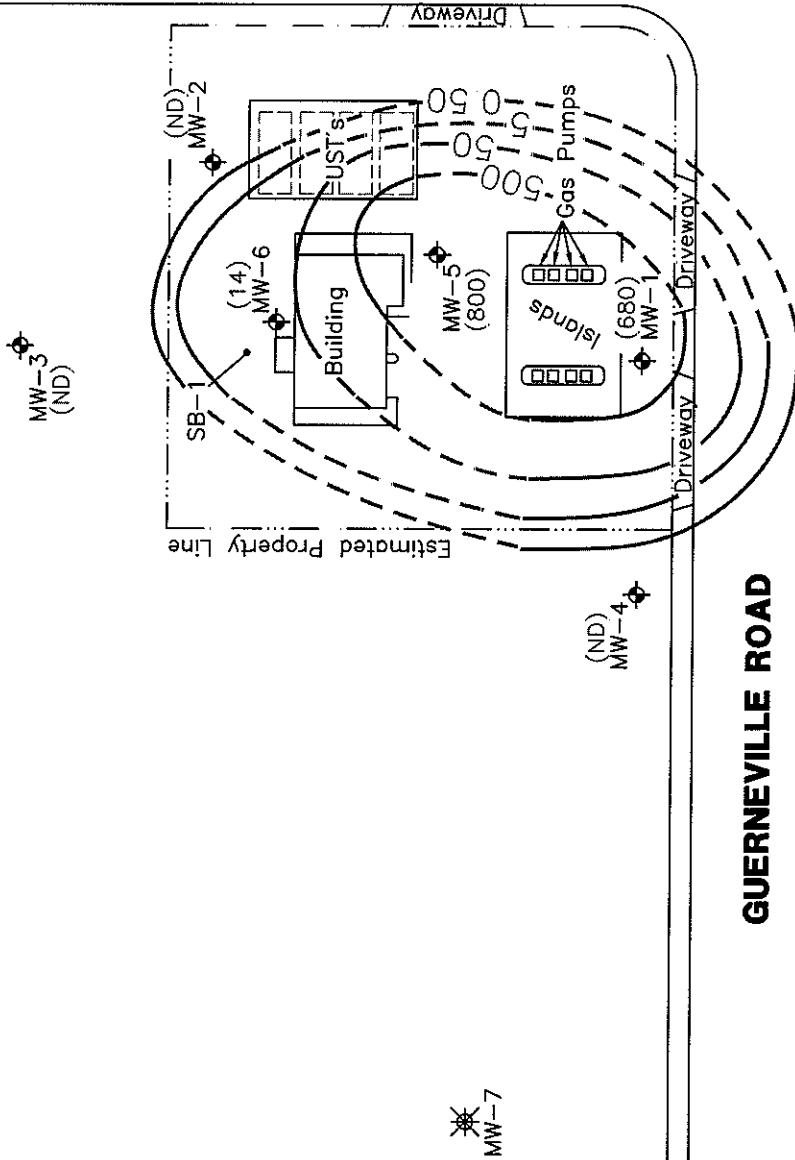
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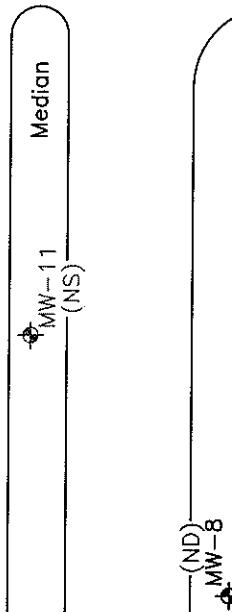
Rotten Robbies
2515 Guerneville Road
Santa Rosa, California

Approximate Scale
1 inch = 20 feet

FULTON ROAD



GUERNVILLE ROAD



**BENZENE IN GROUNDWATER ISOCCONCENTRATION
MAP, NOVEMBER 30, 2005**

**FIGURE
5**

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ROB01.001

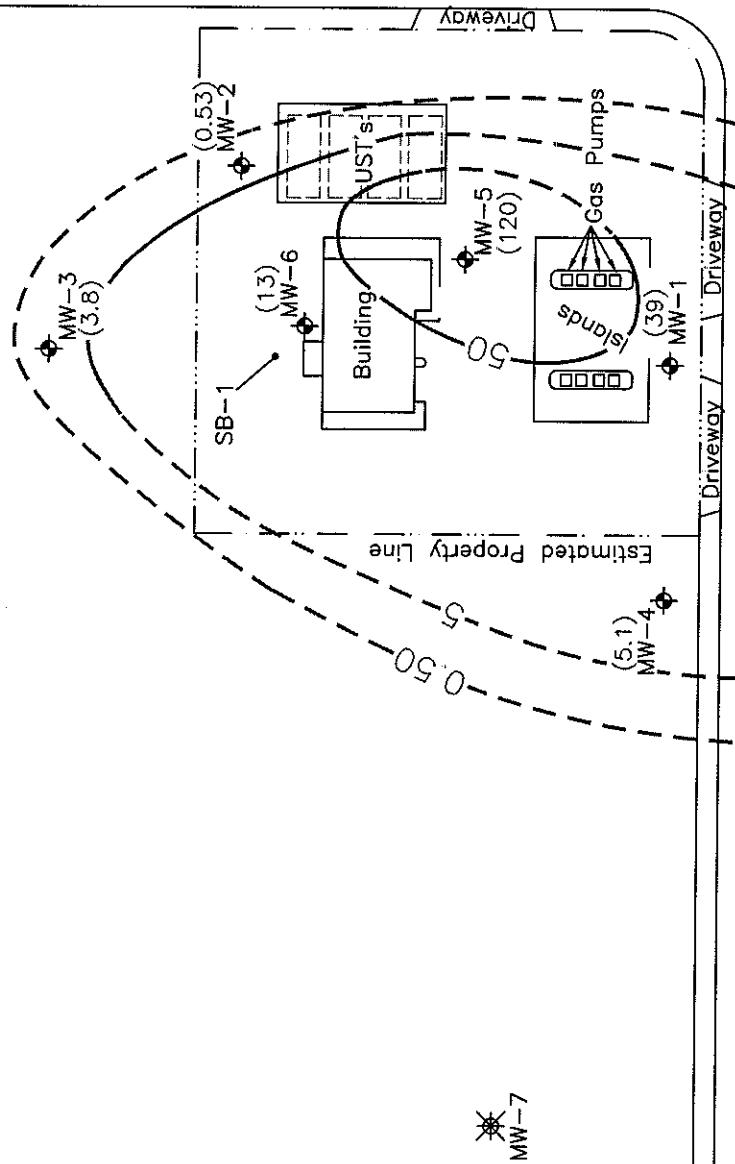
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DATE:	2/1/06
REVISIONS	



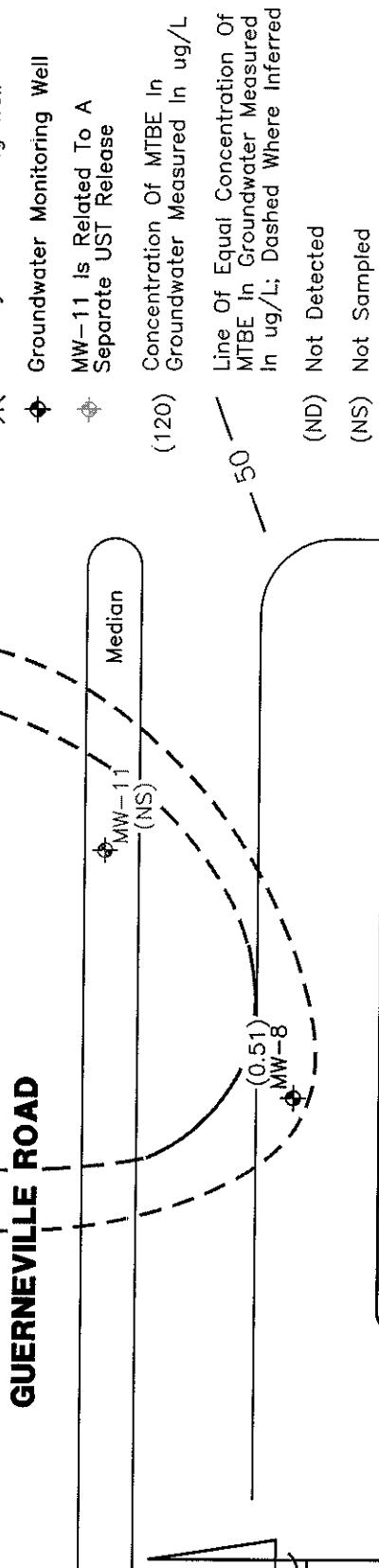
Approximate Scale
1 inch = 20 feet

**FIGURE
5**

FULTON ROAD



GUERNEVILLE ROAD



N
 Approximate Scale
 1 inch = 20 feet

TABLES

TABLE 1
WELL CONSTRUCTION DETAILS
Rotten Robbie Service Station No. 40
2515 Guerneville Road, Santa Rosa, California

Well Number	Well Installation Date	Elevation TOC (feet)	Casing Material	Total Depth (feet)	Well Depth (feet)	Casing Diameter (inches)	Screened Interval (feet)	Filter Pack Interval (feet)
MW-1	10/25/89	95.37	---	30	30	4	8 - 30	6 - 30
MW-2	10/25/89	95.81	---	20	20	4	7 - 20	5 - 20
MW-3	10/26/89	94.50	---	20	20	4	7 - 20	5 - 20
MW-4	6/12/90	94.50	---	18.3	18.3	4	6 - 18.2	5 - 18.2
MW-5	6/12/90	96.44	---	18.3	18.3	4	6 - 18.2	5 - 18.2
MW-6	6/12/90	96.69	---	18.3	18.3	4	6 - 18.2	5 - 18.2
MW-8	5/24/91	95.53	---	19	19	4	7 - 19	5 - 19
MW-11		96.28	---	---	---	---	---	---

Notes:

--- = Information not available

TOC = Top of Casing

MW-11 is the responsibility of a separate consultant

TABLE 2
GROUNDWATER ELEVATION DATA
Rotten Robbie Service Station #40
2515 Guerneville Road, Santa Rosa, California
(All measurements are in feet)

Monitoring Well	Date	Reference Elevation* (MSL)	Depth to Groundwater (Feet)	Groundwater Elevation Feet)	Groundwater Flow Direction
MW-1	11/30/05	95.37	7.73	87.64	SSW
MW-2	11/30/05	95.81	6.76	89.05	SSW
MW-3	11/30/05	94.50	5.79	88.71	SSW
MW-4	11/30/05	94.50	7.04	87.46	SSW
MW-5	11/30/05	96.44	8.11	88.33	SSW
MW-6	11/30/05	96.69	7.88	88.81	SSW
MW-7	10/6/95	Destroyed			
MW-8	11/30/05	93.53	6.27	87.26	SSW
MW-11	11/30/05	96.28	---	---	SSW

Note

--- -Measurement not taken

All measurement are in feet

MSL -Monitoring wells surveyed by Apex to msl

MW-11 is the responsibility of another consultant

TABLE 3
GROUNDWATER ANALYTICAL DATA
Rotten Robbie Service Station #40
2515 Guerneville Road, Santa Rosa, California

Sample ID	Date	TPH as		Benzene (ug/L)	Toluene (ug/L)	Ethyl benzene (ug/L)	Total Xylenes (ug/L)	Five Fuel Oxygenates				1,2-DCA (ug/L)	EDB (ug/L)
		Gasoline (ug/L)	Diesel (ug/L)					MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)		
MW-1	11/30/05	2,300	---	680	4.7	6.8	21	39	1.8	<1.5	680	<1.5	<1.5
MW-2	11/30/05	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
MW-3	11/30/05	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
MW-4	11/30/05	<50	---	<0.50	<0.50	<0.50	<0.50	5.1	<0.50	<0.50	<5.0	<0.50	<0.50
MW-5	11/30/05	3,000	---	800	5.5	57	20	120	<1.5	<1.5	680	<1.5	<1.5
MW-6	11/30/05	100	---	14	<0.50	<0.50	13	<0.50	<0.50	<0.50	9.7	<0.50	<0.50
MW-7	10/6/95	Destroyed	---	<0.50	<0.50	<0.50	0.51	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
MW-8	11/30/05	<50	---	---	---	---	---	---	---	---	---	---	---
MW-11	11/30/05	---	---	---	---	---	---	---	---	---	---	---	---

NOTES:

TPH - Total Petroleum Hydrocarbons

MTBE - Methyl Tertiary Butyl Ether

DIPE - Di-Isopropyl Ether

ETBE - Ethyl Tertiary Butyl Ether

TAME - Tertiary Amyl Methyl Ether

TBA - Tertiary Butanol

1,2-DCA - 1,2-Dichloroethane

EDB - Ethylene dibromide

ug/L - micrograms per Liter

--- - Not sampled

MW-11 is the responsibility of another consultant

TABLE 4
HISTORICAL GROUNDWATER ELEVATION DATA
Rotten Robbie Service Station #40
2515 Guerneville Road, Santa Rosa, California
(All measurements are in feet)

Monitoring Well	Date	Reference Elevation* (MSL)	Depth to Groundwater (Feet)	Groundwater Elevation Feet)	Groundwater Flow Direction
MW-1	9/16/93	95.36	8.36	87 00	
	12/9/93		8 66	86 70	
	4/4/94		7 83	87 53	
	7/29/94		9.80	85 56	
	9/22/94		10 38	84 98	
	10/13/94		10 03	85 33	
	4/18/95		6.15	89 21	
	10/6/95		10.26	85 10	
	2/7/96		4.77	90 59	
	5/1/97		8 22	87 14	
	12/3/97		7 21	88 15	
	3/17/98		6 04	89 32	
	6/10/98		7 68	87 68	
	9/30/98		9 64	85 72	
	3/16/99		5 71	89 65	
	11/2/99	95.37	9 40	85 97	
	9/16/00		7 96	87 41	
	10/3/00		9 50	85 87	
	1/9/01		8 85	86 52	
	7/12/01		8.78	86 59	
	1/4/02		4 92	90 45	
	6/11/02		8 15	87 22	
	12/18/02		5 38	89 99	
	3/27/03		6.43	88 94	
	9/25/03		9 34	86 03	
	3/24/05		5 02	90 35	SW
	5/13/05		5 80	89 57	S
	9/16/05		8 58	86 79	S
	11/30/05		7 73	87 64	SSW
MW-2	9/16/93	95.84	8.81	87 03	
	12/9/93		7 89	87 95	
	4/4/94		6 69	89 15	
	7/29/94		8.10	87 74	
	9/22/94		8.51	87 33	
	10/13/94		8 14	87 70	
	4/18/95		5 11	90 73	
	10/6/95		8.75	87 09	
	2/7/96		4 87	90 97	
	5/1/97		6 73	89 11	
	12/3/97		6 90	88 94	
	3/17/98		4 98	90 86	
	6/10/98		6 16	89 68	
	9/30/98		8 30	87 54	
	3/16/99		5 02	90 82	
	11/2/99	95.81	8.47	87 34	
	6/16/00		6 96	88 85	
	10/3/00		8 36	87 45	
	1/9/01		8.12	87 69	
	1/4/02		4.73	91 08	
	6/11/02		7 15	88 66	
	12/18/02		6 77	89 04	
	3/27/03		6 28	89 53	
	9/25/03		8 14	87 67	
	3/24/05		5 16	90 65	SW
	5/13/05		5.18	90 63	S
	9/16/05		7 45	88 36	S
	11/30/05		6 76	89 05	SSW

TABLE 4
HISTORICAL GROUNDWATER ELEVATION DATA
Rotten Robbie Service Station #40
2515 Guerneville Road, Santa Rosa, California
(All measurements are in feet)

Monitoring Well	Date	Reference Elevation* (MSL)	Depth to Groundwater (Feet)	Groundwater Elevation Feet)	Groundwater Flow Direction
MW-3	9/16/93	95.80	8.06	87.74	
	12/9/93		6.48	89.32	
	4/4/94		6.23	89.57	
	7/29/94		6.54	89.26	
	9/22/94		7.01	88.79	
	10/13/94		6.57	89.23	
	4/18/95		3.81	91.99	
	10/6/95		7.70	88.10	
	2/7/96		3.77	92.03	
	5/1/97		5.49	90.31	
	12/3/97		5.37	90.43	
	3/17/98		4.40	91.40	
	6/10/98		4.98	90.82	
	9/30/98		7.11	88.69	
	3/16/99		4.57	91.23	
	11/2/99	95.79	7.56	88.23	
	6/16/00		6.73	89.06	
	10/3/00		7.06	88.73	
	1/9/01		7.74	88.05	
	1/4/02		4.31	91.48	
	6/11/02	94.50	7.22	87.28	
	12/18/02		5.62	88.88	
	3/27/03		8.16	86.34	
	9/25/03		5.93	88.57	
	3/24/05		4.12	90.38	SW
	5/13/05		4.45	90.05	S
	9/16/05		6.57	87.93	S
	11/30/05		5.79	88.71	SSW
MW-4	9/16/93	94.02	9.30	84.72	
	12/9/93		7.39	86.63	
	4/4/94		6.81	87.21	
	7/29/94		8.59	85.43	
	9/22/94		9.27	84.75	
	10/13/94		---	---	
	4/18/95		5.32	88.70	
	10/6/95		---	---	
	2/7/96		3.99	90.03	
	5/1/97		7.14	86.88	
	12/3/97		6.19	87.83	
	3/17/98		5.27	88.75	
	6/10/98		6.81	87.21	
	9/30/98		8.61	85.41	
	3/16/99		5.06	88.96	
	11/2/99	94.50	8.19	86.31	
	6/16/00		7.05	87.45	
	10/3/00		8.41	86.09	
	1/9/01		7.92	86.58	
	1/4/02		4.05	90.45	
	6/11/02		7.22	87.28	
	12/18/02		4.38	90.12	
	3/27/03		5.57	88.93	
	9/25/03		8.48	86.02	
	3/24/05		---	---	SW
	5/13/05		5.07	89.43	S
	9/16/05		7.78	86.72	S
	11/30/05		7.04	87.46	SSW

TABLE 4
HISTORICAL GROUNDWATER ELEVATION DATA
 Rotten Robbie Service Station #40
 2515 Guerneville Road, Santa Rosa, California
 (All measurements are in feet)

Monitoring Well	Date	Reference Elevation* (MSL)	Depth to Groundwater (Feet)	Groundwater Elevation Feet)	Groundwater Flow Direction
MW-5	9/16/93	96 01	10.61	85.40	
	12/9/93		9.22	86.79	
	4/4/94		7.99	88.02	
	7/29/94		9.87	86.14	
	9/22/94		10.43	85.58	
	10/13/94		8.20	87.81	
	4/18/95		6.75	89.26	
	10/6/95		10.42	85.59	
	2/7/96		6.51	89.50	
	5/1/97		8.41	87.60	
	12/3/97		7.89	88.12	
	3/17/98		5.89	90.12	
	6/10/98		7.30	88.71	
	9/30/98		9.77	86.24	
	3/16/99		6.03	89.98	
	11/2/99	96 44	9.84	86.60	
	6/16/00		8.27	88.17	
	10/3/00		9.81	86.63	
	1/9/01		9.31	87.13	
	7/12/01		9.17	87.27	
	1/4/02		6.02	90.42	
	6/11/02		8.22	88.22	
	12/18/02		8.30	88.14	
	3/27/03		6.76	89.68	
	9/25/03		9.24	87.20	
	3/24/05		7.31	89.13	SW
	5/13/05		6.59	89.85	S
	9/16/05		8.90	87.54	S
	11/30/05		8.11	88.33	SSW
MW-6	9/16/93	96 22	10.33	85.89	
	12/9/93		9.21	87.01	
	4/4/94		7.69	88.53	
	7/29/94		9.38	86.84	
	9/22/94		9.92	86.30	
	10/13/94		8.68	87.54	
	4/18/95		6.12	90.10	
	10/6/95		10.10	86.12	
	2/7/96		5.76	90.46	
	5/1/97		8.08	88.14	
	12/3/97		7.96	88.26	
	3/17/98		5.93	90.29	
	6/10/98		7.78	88.44	
	9/30/98		9.45	86.77	
	3/16/99		5.98	90.24	
	11/2/99	96 69	9.68	87.01	
	6/16/00		8.06	88.63	
	10/3/00		9.47	87.22	
	1/9/01		9.29	87.40	
	7/12/01		8.91	87.78	
	1/4/02		5.40	91.29	
	6/11/02		8.11	88.58	
	12/18/02		7.82	88.87	
	3/27/03		6.76	89.93	
	9/25/03		9.15	87.54	
	3/24/05		5.68	91.01	SW
	5/13/05		6.13	90.56	S
	9/16/05		8.66	88.03	S
	11/30/05		7.88	88.81	SSW

TABLE 4
HISTORICAL GROUNDWATER ELEVATION DATA
 Rotten Robbie Service Station #40
 2515 Guerneville Road, Santa Rosa, California
 (All measurements are in feet)

Monitoring Well	Date	Reference Elevation* (MSL)	Depth to Groundwater (Feet)	Groundwater Elevation (Feet)	Groundwater Flow Direction
MW-7	9/16/93	93.44	8.59	84.85	
	12/9/93		6.79	86.65	
	4/4/94		6.07	87.37	
	7/29/94		8.33	85.11	
	9/22/94		8.69	84.75	
	10/13/94		---	---	
	4/19/95		4.71	88.73	
	10/6/95		Destroyed		
MW-8	9/16/93	93.07	8.83	84.24	
	12/9/93		7.27	85.80	
	4/4/94		5.94	87.13	
	7/29/94		8.30	84.77	
	9/22/94		8.93	84.14	
	10/13/94		---	---	
	4/18/95		---	---	
	10/6/95		---	---	
	2/7/96		---	---	
	3/17/98		4.24	88.83	
	6/10/98		7.88	85.19	
	9/30/98		8.25	84.82	
	3/16/99		4.26	88.81	
	11/2/99	93.53	7.67	85.86	
	6/16/00		6.49	87.04	
	10/3/00		7.88	85.65	
	1/9/01		6.90	86.63	
	1/4/02		3.07	90.46	
	6/11/02		6.58	86.95	
	12/18/02		3.59	89.94	
	3/27/03		4.99	88.54	
	9/25/03		8.01	85.52	
	3/24/05		4.25	89.28	SW
MW-11	5/13/05	96.28	5.11	88.42	S
	9/16/05		7.11	86.42	S
	11/30/05		6.27	87.26	SSW
	3/24/05		---	---	
	5/13/05		6.83	89.45	S
	9/16/05		---	---	S
	11/30/05		---	---	SSW

Note

--- Measurement not taken

All measurement are in feet

MSL Monitoring wells surveyed by Apex to msl

MW-11 is the responsibility of another consultant

TABLE 5
HISTORICAL GROUNDWATER ANALYTICAL DATA
 Rotten Robble Service Station #40
 2515 Guerneville Road Santa Rosa California

Sample ID	Date	TPH as		Benzene (ug/L)	Toluene (ug/L)	Ethyl benzene (ug/L)	Total Xylenes (ug/L)	Five Fuel Oxygenates					1,2-DCA (ug/L)	EDB (ug/L)
		Gasoline (ug/L)	Diesel (ug/L)					MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)		
MW-1	10/27/90	ND	ND	1.6	4.4	1.0	4.0	—	—	—	—	—	—	—
	3/21/90	140	280	20	0.30	1.9	1.4	—	—	—	—	—	—	—
	6/13/90	420	ND	93	5.5	8.4	11	—	—	—	—	—	—	—
	9/18/90	170	ND	28	1.3	2.5	4.9	—	—	—	—	—	—	—
	12/20/90	ND	60	8.9	0.40	1.0	0.90	—	—	—	—	—	—	—
	3/20/91	91	ND	11	ND	2.0	1.0	—	—	—	—	—	—	—
	6/19/91	89	ND	23	1.6	3.4	5.3	—	—	—	—	—	—	—
	9/26/91	120	ND	36	ND	11	9.7	—	—	—	—	—	—	—
	12/30/91	78	ND	0.80	ND	ND	ND	—	—	—	—	—	—	—
	3/18/92	ND	—	2.8	ND	ND	ND	—	—	—	—	—	—	—
	6/17/92	ND	ND	11	ND	1.6	1.5	—	—	—	—	—	—	—
	9/24/92	210	—	16	0.9	1.9	2.5	—	—	—	—	—	—	—
	12/10/92	220	—	7.4	ND	1.6	2.2	—	—	—	—	—	—	—
	3/9/93	190	—	2.4	ND	1.0	1.2	—	—	—	—	—	—	—
	9/16/93	280	—	37	3.5	6.8	8.8	—	—	—	—	—	—	—
	4/4/94	160	—	14	0.60	1.5	2.1	—	—	—	—	—	—	—
	10/13/94	370	—	67	3.5	5.8	10	—	—	—	—	—	—	—
	4/18/95	380	—	59	3.0	2.6	9.2	—	—	—	—	—	—	—
	10/6/95	1,100	—	220	5.8	9.3	21	—	—	—	—	—	—	—
	2/7/96	200	—	54	ND	1.3	3.4	120	—	—	—	—	—	—
	5/1/97	1,200	—	240	8.1	14	34	130	—	—	—	—	—	—
	12/3/97	540	—	130	1.3	4.3	7.1	210	—	—	—	—	—	—
	3/17/98	320	—	89	0.69	3.0	3.7	230	—	—	—	—	—	—
	6/10/98	7,000	—	2,500	71	140	390	130	—	—	—	—	—	—
	9/30/98	1,700	—	790	9.6	17	49	340	—	—	—	—	—	—
	3/16/99	970	—	300	8.6	5.5	20	210	—	—	—	—	—	—
	11/2/99	760	—	190	<2.5	5.6	11	130	—	—	—	—	—	—
	6/16/00	1,100	—	330	6.8	10	22	260	—	—	—	—	—	—
	10/3/00	2,000	—	480	8.1	45	41	240	—	—	—	—	—	—
	1/9/01	780	—	140	1.8	2.7	12	210	—	—	—	—	—	—
	7/12/01	2,500	—	860	25	120	210	230	—	—	—	—	—	—
	1/4/02	990	—	130	4.0	2.1	11	290	—	—	—	—	—	—
	6/11/02	2,600	—	790	13	36	64	290	—	—	—	—	—	—
	12/18/02	2,300	—	550	<10	<10	<20	340	—	—	—	—	—	—
	3/27/03	2,700	380	810	48	8.6	41	460	—	—	—	—	—	—
	9/25/03	3,900	—	1,300	<12.5	18	<25	310	—	—	—	—	—	—
	3/24/05	3,200	—	320	3.4	17	27	59	1.6	<0.50	<0.50	680	<0.50	<0.50
	5/13/05	4,300	—	680	12	100	120	74	2.0	<0.50	<0.50	600	<0.50	<0.50
	9/16/05	4,200	—	1,100	10	36	49	62	2.7	<2.0	<2.0	650	<2.0	<2.0
	11/30/05	2,300	—	680	4.7	6.8	21	39	1.8	<1.5	<1.5	680	<1.5	<1.5
MW-2	3/9/93	ND	—	ND	ND	ND	ND	ND	—	—	—	—	—	—
	9/16/93	ND	—	ND	ND	ND	ND	ND	—	—	—	—	—	—
	4/4/94	NO	—	ND	ND	ND	ND	ND	—	—	—	—	—	—
	10/13/94	NO	—	ND	ND	ND	ND	ND	—	—	—	—	—	—
	4/18/95	ND	—	ND	ND	ND	ND	ND	—	—	—	—	—	—
	10/6/95	ND	—	ND	ND	ND	ND	ND	—	—	—	—	—	—
	2/7/96	ND	—	ND	ND	ND	ND	ND	—	—	—	—	—	—
	5/1/97	<50	—	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—
	3/17/98	<50	—	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—
	6/10/98	<50	—	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—
	9/30/98	<50	—	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—
	3/16/99	<50	—	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—
	11/2/99	<50	—	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—
	6/18/00	<50	—	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—
	10/3/00	<50	—	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—
	1/9/01	<50	—	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—
	7/12/01	<50	—	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—
	1/4/02	<50	—	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—
	6/11/02	<50	—	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—
	12/18/02	<50	—	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—
	3/27/03	<50	—	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—
	9/25/03	<50	—	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—
	3/24/05	<50	—	1.6	<0.50	<0.50	2.1	1.5	<0.50	<0.50	<0.50	4.0	<0.50	<0.50
	5/13/05	<50	—	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	4.0	<0.50	<0.50
	9/16/05	<50	—	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	4.0	<0.50	<0.50
	11/30/05	<50	—	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	4.0	<0.50	<0.50

TABLE 5
HISTORICAL GROUNDWATER ANALYTICAL DATA
 Rotten Robble Service Station #40
 2515 Guerneville Road Santa Rosa California

Sample ID	Date	TPH as		Benzene (ug/L)	Toluene (ug/L)	Ethyl benzene (ug/L)	Total Xylenes (ug/L)	Five Fuel Oxygenates					1,2-DCA (ug/L)	EDB (ug/L)
		Gasoline (ug/L)	Diesel (ug/L)					MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)		
MW-4	3/9/93	ND	—	ND	ND	ND	ND	ND	—	—	—	—	—	—
	9/16/93	ND	—	ND	0.50	ND	ND	ND	—	—	—	—	—	—
	4/4/94	ND	—	ND	ND	ND	ND	ND	—	—	—	—	—	—
	10/13/94	—	—	—	—	—	—	—	—	—	—	—	—	—
	4/18/95	—	—	—	—	—	—	—	—	—	—	—	—	—
	10/6/95	—	—	—	—	—	—	—	—	—	—	—	—	—
	2/7/96	ND	—	ND	ND	ND	ND	ND	—	—	—	—	—	—
	12/3/97	<50	—	<5.0	<0.50	<0.50	<0.50	20	—	—	—	—	—	—
	5/1/97	<50	—	<5.0	<0.50	<0.50	<0.50	<5.0	—	—	—	—	—	—
	3/17/98	75	—	8.5	<0.50	<0.50	<0.50	480	—	—	—	—	—	—
	9/30/98	<50	—	<0.50	<0.50	<0.50	<0.50	14	—	—	—	—	—	—
	3/16/99	140	—	25	7.0	4.8	11	14	—	—	—	—	—	—
	11/2/99	<50	—	<0.50	<0.50	<0.50	<0.50	<5.0	—	—	—	—	—	—
	1/9/01	<50	—	<0.50	<0.50	<0.50	<0.50	5.4	—	—	—	—	—	—
	1/4/02	<50	—	<0.50	<0.50	<0.50	<0.50	<5.0	—	—	—	—	—	—
	6/11/02	<50	—	5.5	<0.50	<0.50	<1.0	14	—	—	—	—	—	—
	12/18/02	<50	—	<0.50	<0.50	<0.50	<1.0	<5.0	—	—	—	—	—	—
	3/27/03	<50	—	<0.50	<0.50	<0.50	<1.0	<5.0	—	—	—	—	—	—
	9/25/03	<50	—	<0.50	<0.50	<0.50	<1.0	5.2	—	—	—	—	—	—
	3/24/05	—	—	—	—	—	—	—	—	—	—	—	—	—
	5/13/05	<50	—	<0.50	<0.50	<0.50	<0.50	0.90	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
	9/16/05	<50	—	<0.50	<0.50	<0.50	<0.50	3.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
	11/30/05	<50	—	<0.50	<0.50	<0.50	<0.50	5.1	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
MW-5	6/13/90	4,400	ND	420	490	110	550	—	—	—	—	—	—	—
	9/18/90	10,100	ND	2,800	450	260	800	—	—	—	—	—	—	—
	12/20/90	3,200	ND	480	130	51	180	—	—	—	—	—	—	—
	3/20/91	8,800	ND	1,700	570	170	870	—	—	—	—	—	—	—
	6/19/91	22,000	370	4,000	1,900	460	2,500	—	—	—	—	—	—	—
	9/26/91	21,000	ND	6,400	2,300	780	3,400	—	—	—	—	—	—	—
	12/30/91	8,700	—	2,900	740	260	950	—	—	—	—	—	—	—
	3/18/92	4,100	—	1,100	300	120	480	—	—	—	—	—	—	—
	6/17/92	3,000	—	1,800	410	280	810	—	—	—	—	—	—	—
	9/24/92	5,400	—	1,800	410	240	600	—	—	—	—	—	—	—
	12/10/92	6,600	—	1,700	330	170	580	—	—	—	—	—	—	—
	3/9/93	5,200	—	1,300	210	120	530	—	—	—	—	—	—	—
	9/16/93	7,500	—	3,400	380	350	1,100	—	—	—	—	—	—	—
	4/4/94	5,100	—	2,000	110	210	510	—	—	—	—	—	—	—
	10/13/94	5,900	—	1,600	65	150	420	—	—	—	—	—	—	—
	4/18/95	26,000	—	3,500	140	410	940	—	—	—	—	—	—	—
	10/6/95	18,000	—	2,800	57	230	540	—	—	—	—	—	—	—
	2/7/96	7,100	—	2,300	ND	160	230	82	—	—	—	—	—	—
	5/1/97	12,000	—	2,300	60	290	300	280	—	—	—	—	—	—
	12/3/97	4,700	—	3,100	24	130	200	440	—	—	—	—	—	—
	3/17/98	9,300	—	3,100	64	190	280	490	—	—	—	—	—	—
	6/10/98	11,000	—	3,700	160	250	380	390	—	—	—	—	—	—
	9/30/98	9,800	—	2,700	75	240	290	470	—	—	—	—	—	—
	3/16/99	9,600	—	3,500	59	300	300	490	—	—	—	—	—	—
	11/2/99	7,300	—	2,600	25	140	130	440	—	—	—	—	—	—
	6/16/00	14,000	—	5,900	110	420	460	830	—	—	—	—	—	—
	10/3/00	5,000	—	1,500	20	76	62	520	—	—	—	—	—	—
	1/9/01	4,600	—	1,400	16	110	120	580	—	—	—	—	—	—
	7/12/01	8,700	—	3,800	66	260	300	650	—	—	—	—	—	—
	1/4/02	7,100	—	2,200	<50	170	140	650	—	—	—	—	—	—
	6/11/02	14,000	—	5,400	160	430	490	740	—	—	—	—	—	—
	12/18/02	4,100	—	1,700	<12.5	<12.5	<25	660	—	—	—	—	—	—
	3/27/03	7,000	—	3,100	170	<50	120	980	—	—	—	—	—	—
	9/25/03	8,300	—	5,000	40	290	84	640	—	—	—	—	—	—
	3/24/05	5,800	—	1,100	64	100	110	160	<2.5	<2.5	<2.5	750	<2.5	<2.5
	5/13/05	9,300	—	1,800	400	160	600	170	<2.5	<2.5	<2.5	710	<2.5	<2.5
	9/16/05	6,600	—	1,100	21	90	89	170	<2.5	<2.5	<2.5	730	<2.5	<2.5
	11/30/05	3,000	—	800	5.5	57	29	120	<1.5	<1.5	<1.5	680	<1.5	<1.5

TABLE 5
HISTORICAL GROUNDWATER ANALYTICAL DATA
 Rotten Robbie Service Station #40
 2515 Guerneville Road Santa Rosa California

Sample ID	Date	TPH as		Benzene (ug/L)	Toluene (ug/L)	Ethyl benzene (ug/L)	Total Xylenes (ug/L)	Five Fuel Oxygenates					1,2-DCA (ug/L)	EDB (ug/L)
		Gasoline (ug/L)	Diesel (ug/L)					MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)		
MW-8	6/13/90	41000	—	12000	2000	1000	3100	—	—	—	—	—	—	—
	8/18/90	17300	—	8700	610	260	1300	—	—	—	—	—	—	—
	12/20/90	5100	—	710	93	91	220	—	—	—	—	—	—	—
	3/20/91	11000	—	4800	160	480	900	—	—	—	—	—	—	—
	5/19/91	25000	—	6600	750	1700	3300	—	—	—	—	—	—	—
	9/26/91	14000	—	5400	920	720	2500	—	—	—	—	—	—	—
	12/30/91	22000	—	2800	1100	1500	4700	—	—	—	—	—	—	—
	3/18/92	2400	—	750	ND	180	200	—	—	—	—	—	—	—
	6/17/92	6100	—	3300	ND	1200	1400	—	—	—	—	—	—	—
	9/24/92	19000	—	3700	450	1500	2100	—	—	—	—	—	—	—
	12/10/92	13000	—	2100	190	740	1500	—	—	—	—	—	—	—
	3/9/93	2700	—	590	ND	120	160	—	—	—	—	—	—	—
	9/16/93	2900	—	990	59	160	280	—	—	—	—	—	—	—
	4/4/94	1800	—	100	2.2	34	32	—	—	—	—	—	—	—
	10/13/94	2700	—	680	18	100	230	—	—	—	—	—	—	—
	4/18/95	1400	—	100	2.0	10	270	—	—	—	—	—	—	—
	10/6/95	5800	—	820	18	130	350	—	—	—	—	—	—	—
	2/7/96	420	—	15	ND	8.6	0.83	17	—	—	—	—	—	—
	5/1/97	470	—	74	20	13	26	21	—	—	—	—	—	—
	12/3/97	220	—	36	0.73	3.8	9.4	14	—	—	—	—	—	—
	3/17/98	72	—	75	<0.50	<0.50	<0.50	340	—	—	—	—	—	—
	9/30/98	1800	—	390	11	57	71	46	—	—	—	—	—	—
	3/16/99	120	—	190	3.1	0.89	2.9	140	—	—	—	—	—	—
	11/2/99	680	—	180	5.0	16	13	21	—	—	—	—	—	—
	6/16/00	450	—	69	<2.5	6.9	6.1	420	—	—	—	—	—	—
	10/3/00	550	—	120	2.7	9.2	6.0	29	—	—	—	—	—	—
	1/9/01	290	—	63	2.0	6.4	6.8	74	—	—	—	—	—	—
	7/12/01	420	—	65	<2.5	6.2	6.1	74	—	—	—	—	—	—
	1/4/02	190	—	87	<0.50	0.97	<0.50	49	—	—	—	—	—	—
	6/11/02	<250	—	5.4	<2.5	<2.5	<5.0	400	—	—	—	—	—	—
	12/18/02	320	—	120	<2.5	<2.5	<5.0	100	—	—	—	—	—	—
	3/27/03	<250	—	<2.5	<2.5	<2.5	<5.0	200	—	—	—	—	—	—
	9/25/03	530	—	<1.0	<1.0	<1.0	<2.0	16	—	—	—	—	—	—
	2/24/05	<50	—	<0.50	<0.50	<0.50	<0.50	12	<0.50	<0.50	<0.50	6.7	<0.50	<0.50
	5/13/05	<50	—	<0.50	<0.50	<0.50	<0.50	12	<0.50	<0.50	<0.50	5.2	<0.50	<0.50
	9/16/05	100	—	7.3	<0.50	0.81	<0.50	15	<0.50	<0.50	<0.50	6.9	<0.50	<0.50
	11/30/05	100	—	14	<0.50	<0.50	<0.50	13	<0.50	<0.50	<0.50	9.7	<0.50	<0.50
MW-7	3/9/93	ND	—	ND	ND	ND	ND	—	—	—	—	—	—	—
	9/16/93	—	—	—	—	—	—	—	—	—	—	—	—	—
	4/4/94	—	—	—	—	—	—	—	—	—	—	—	—	—
	10/13/94	—	—	—	—	—	—	—	—	—	—	—	—	—
	4/18/95	—	—	—	—	—	—	—	—	—	—	—	—	—
	10/6/95	Destroyed	—	—	—	—	—	—	—	—	—	—	—	—
MW-8	3/9/93	7100	—	170	—	—	—	—	—	—	—	—	—	—
	9/16/93	—	—	—	—	—	—	—	—	—	—	—	—	—
	4/4/94	—	—	—	—	—	—	—	—	—	—	—	—	—
	10/13/94	—	—	—	—	—	—	—	—	—	—	—	—	—
	4/18/95	—	—	—	—	—	—	—	—	—	—	—	—	—
	10/6/95	—	—	—	—	—	—	—	—	—	—	—	—	—
	2/7/96	—	—	—	—	—	—	—	—	—	—	—	—	—
	3/17/98	87	—	0.9	<0.50	<0.50	<0.50	—	—	—	—	—	—	—
	6/10/98	2400	—	79	9.5	5.5	27	86	—	—	—	—	—	—
	9/30/98	380	—	48	0.60	10	<0.50	5.0	—	—	—	—	—	—
	3/16/99	65	—	<0.50	<0.50	<0.50	<0.50	5.0	—	—	—	—	—	—
	11/2/99	<50	—	<0.50	<0.50	<0.50	<0.50	5.0	—	—	—	—	—	—
	6/16/00	<50	—	<0.50	<0.50	<0.50	<0.50	8.4	—	—	—	—	—	—
	10/3/00	<50	—	<0.50	<0.50	<0.50	<0.50	8.1	—	—	—	—	—	—
	1/9/01	<50	—	<0.50	<0.50	<0.50	<0.50	5.0	—	—	—	—	—	—
	7/12/01	<50	—	<0.50	<0.50	<0.50	<0.50	5.0	—	—	—	—	—	—
	1/4/02	<50	—	<0.50	<0.50	<0.50	<0.50	5.0	—	—	—	—	—	—
	6/11/02	<50	—	<0.50	<0.50	<0.50	<1.0	4.50	—	—	—	—	—	—
	12/18/02	<50	—	<0.50	<0.50	<0.50	<1.0	4.10	—	—	—	—	—	—
	3/27/03	<50	—	<0.50	<0.50	<0.50	<1.0	2.7	—	—	—	—	—	—
	9/25/03	<50	—	<0.50	<0.50	<0.50	<1.0	2.9	—	—	—	—	—	—
	9/16/05	52	—	<0.50	<0.50	<0.50	<0.50	0.68	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
	11/30/05	<50	—	<0.50	<0.50	<0.50	<0.50	0.51	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
MW-11	3/24/05	—	—	—	—	—	—	4.1	<0.50	<0.50	<0.50	—	—	—
	5/13/05	<50	—	<0.50	<0.50	<0.50	<0.50	—	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
	9/16/05	—	—	—	—	—	—	—	—	—	—	—	—	—
	11/30/05	—	—	—	—	—	—	—	—	—	—	—	—	—

NOTES:

TPH .. Total Petroleum Hydrocarbons
 MTBE .. Methyl Tertiary Butyl Ether
 DIPE .. Diisopropyl Ether
 ETBE .. Ethyl Tertiary Butyl Ether

TAME .. Tertiary Amyl Methyl Ether
 TBA .. Tertiary Butanol
 1,2-DCA .. 1,2-Dichloroethane
 EDB .. Ethylene dibromide

ug/L .. micrograms per Liter
 — .. Not sampled
 MW-11 is the responsibility of another consultant

APPENDIX A

APEX STANDARD OPERATING PROCEDURES

APEX ENVIROTECH, INC.
STANDARD OPERATING PROCEDURES
Quarterly Monitoring Reports

SOP - 4
SAMPLE IDENTIFICATION AND CHAIN-OF-CUSTODY PROCEDURES

Sample identification and chain-of-custody procedures ensure sample integrity as well as document sample possession from the time of collection to ultimate disposal. Each sample container submitted for analysis is labeled to identify the job number, date, time of sample collection, a sample number unique to the sample, any in-field measurements made, other pertinent field observations also recorded on the field excavation or boring logs.

Chain-of-custody forms are used to record possession of the sample from time of collection to arrival at the laboratory. During shipment, the person with custody of the samples will relinquish them to the next person by signing the chain-of-custody form(s) and noting the date and time. The sample control officer at the laboratory will verify sample integrity, correct preservation, confirm collection in the proper container(s), and ensure adequate volume for analysis.

If these conditions are met, the samples will be assigned unique laboratory log numbers for identification throughout analysis and reporting. The log numbers will be recorded on the chain-of-custody forms and in the legally-required log book maintained in the laboratory. The sample description, date received, client's name and any other relevant information will also be recorded.

SOP - 5
LABORATORY ANALYTICAL QUALITY ASSURANCE AND CONTROL

In addition to routine instrument calibration, replicates, spikes, blanks, spiked blanks, and certified reference materials are routinely analyzed at method-specific frequencies to monitor precision and bias. Additional components of the laboratory Quality Assurance/Quality Control program include:

- 1 Participation in state and federal laboratory accreditation/certification programs;
- 2 Participation in both U.S. EPA Performance Evaluation studies (WS and WP studies) and inter-laboratory performance evaluation programs;
- 3 Standard operating procedures describing routine and periodic instrument maintenance;
- 4 "out-of-Control"/Corrective Action documentation procedures; and
- 5 Multi-level review of raw data and client reports

SOP - 7
GROUNDWATER PURGING AND SAMPLING

Prior to water sampling, each well is purged by evacuating a minimum of three wetted well-casing volumes of groundwater. When required, purging will continue until either the discharge water temperature, conductivity, or pH stabilize, a maximum of ten wetted-casing volumes of groundwater have been recovered, or the well is bailed dry.

When practical, the groundwater sample should be collected when the water level in the well recovers to at least 80 percent of its static level.

The sampling equipment consists of either a "Teflon" bailer, PVC bailer, or stainless steel bladder pump with a "Teflon" bladder. If the sampling system is dedicated to the well, then the bailer is usually "Teflon," but the bladder pump is PVC with a polypropylene bladder. In general and depending on the intended laboratory analysis, 40-milliliter glass, volatile organic analysis (VOA) vials, with "Teflon" septa, are used as sample containers.

SOP - 12
MEASURING LIQUID LEVELS USING WATER LEVEL METER OR INTERFACE PROBE

Field equipment used for liquid-level gauging typically includes the measuring instrument (water-level meter or interface probe and product bailer(s)). The field kit also includes cleaning supplies (buckets, solution spray bottles and deionized water) to be used in cleaning the equipment between wells.

Prior to measurements, the instrument tip is lowered into the well until it touches bottom. Using the previously established top-of-casing or top-of-box (i.e. wellhead/vault) point, the probe cord (or halyard) is marked and a measuring tape (graduated in hundredths of a foot) is used to determine the distance between the probe end and the marking on the cord. This measurement is then recorded on the liquid-level data sheet as the "Measured Total Depth" of the well.

When necessary in using the interface probe to measure liquid levels, the probe is first electrically grounded to either the metal stove pipe or another metal object nearby. When no ground is available, reproducible measurements can be obtained by clipping the ground lead to the handle of the interface probe case.

The probe tip is then lowered into the well and submerged in the groundwater. An oscillating (beeping) tone indicates the probe is in water. The probe is slowly raised until either the oscillating tone ceases or becomes a steady tone. In either case, this is the depth-to-water (DTW) indication of the DTW measurement is made accordingly. The steady tone indicates floating liquid hydrocarbons (FLH). In this case, the depth-to-product (DTP) indication and the DTP measurement is made accordingly.

The process of lowering and raising the probe must be repeated several times to ensure accurate measurements. The DTW and DTP measurements are recorded on the liquid-level data sheet. When FLH are indicated by the probe's response, a product bailer is lowered partially through the FLH water interface to confirm the FLH thickness particularly in cases where the FLH layer is quite thin. This measurement is recorded on the data sheet as "FLH thickness."

In order to avoid cross-contamination of wells during the liquid-level measurement process, wells are measured in the order of "clean" to "dirty" (where such information is available). In addition, all measurement equipment is cleaned with solution and thoroughly rinsed with deionized water before use, between measurements in respective wells, and at the completion of the day's use.

APPENDIX B

FIELD DATA SHEETS



Groundwater Level Data Sheet

Project ROBO1_001
Location Santa Rosa, CA
Date 11/30/05
Recorded By RCM

Well Volume Calculation:
 $(2'' \times 0.16) (4' \times 0.65)$



Monitoring Data

Project: Rotten Robbie's
Project Number: ROB01.001
Date: 11/30/05
Recorded By: DCM

WELL	TIME	TEMP (deg C)	pH	COND. (uS/cm)	DISSOLVED OXYGEN	TOTAL VOLUME REMOVED	COMMENTS/OBSERVATIONS
MW-8	1005	17.4	7.0	506		8	1.5 gpm
	1010	17.8	6.6	409		16	
	1016	19.2	6.4	481		24	sampled @ 1510
MW-2	1037	19.2	6.1	713		8	
	1043	20.7	6.2	730		17	
	1048	20.3	6.3	728		25	sampled @ 1520
MW-4	1107	18.7	6.2	1616		7	
	1111	19.1	6.2	1063		14	Well dry @ 14 gal/purge
	1116					21 sec	samp last @ 1535
MW-3	1208	19.5	6.6	652		9	
	1214	20.0	6.5	1052		18	
	1220	19.4	6.7	901		27	samp last @ 1545



Monitoring Data

Project:

Project Number: ROBOC-001
Date: 11/30/05
Recorded By: RCM

TEMPH.XLS
4/1/97

APPENDIX C

LABORATORY ANALYTICAL REPORT AND

CHAIN-OF-CUSTODY FORM



Report Number : 47227

Date : 12/7/2005

Kelly Felker
Apex Envirotech Inc.
11244 Pyrites Way
Gold River, CA 95670-4481

Subject : 7 Water Samples
Project Name : Rotten Robbie Station #40
Project Number : ROB01.001-QM

Dear Ms. Felker,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink, appearing to read "Joel Kiff".
Joel Kiff



Report Number : 47227

Date : 12/7/2005

Project Name : Rotten Robbie Station #40

Project Number : ROB01.001-QM

Sample : MW-1

Matrix : Water

Lab Number : 47227-01

Sample Date : 11/30/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	680	1 5	ug/L	EPA 8260B	12/6/2005
Toluene	4.7	1 5	ug/L	EPA 8260B	12/6/2005
Ethylbenzene	6.8	1.5	ug/L	EPA 8260B	12/6/2005
Total Xylenes	21	1 5	ug/L	EPA 8260B	12/6/2005
Methyl-t-butyl ether (MTBE)	39	1.5	ug/L	EPA 8260B	12/6/2005
Diisopropyl ether (DIPE)	1.8	1.5	ug/L	EPA 8260B	12/6/2005
Ethyl-t-butyl ether (ETBE)	< 1.5	1 5	ug/L	EPA 8260B	12/6/2005
Tert-amyl methyl ether (TAME)	< 1.5	1.5	ug/L	EPA 8260B	12/6/2005
Tert-Butanol	680	7 0	ug/L	EPA 8260B	12/6/2005
TPH as Gasoline	2300	150	ug/L	EPA 8260B	12/6/2005
1,2-Dichloroethane	< 1.5	1 5	ug/L	EPA 8260B	12/6/2005
1,2-Dibromoethane	< 1.5	1.5	ug/L	EPA 8260B	12/6/2005
Toluene - d8 (Surr)	99.6		% Recovery	EPA 8260B	12/6/2005
4-Bromofluorobenzene (Surr)	96.3		% Recovery	EPA 8260B	12/6/2005
Dibromofluoromethane (Surr)	98.6		% Recovery	EPA 8260B	12/6/2005
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	12/6/2005

Approved By: Joel Kiff



Report Number : 47227

Date : 12/7/2005

Project Name : Rotten Robbie Station #40

Project Number : ROB01.001-QM

Sample : MW-2

Matrix : Water

Lab Number : 47227-02

Sample Date : 11/30/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Methyl-t-butyl ether (MTBE)	0.53	0.50	ug/L	EPA 8260B	12/6/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/6/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/6/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	12/6/2005
4-Bromofluorobenzene (Surr)	96.4		% Recovery	EPA 8260B	12/6/2005
Dibromofluoromethane (Surr)	101		% Recovery	EPA 8260B	12/6/2005
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	12/6/2005

Approved By: Joel Kiff



Report Number : 47227

Date : 12/7/2005

Project Name : Rotten Robbie Station #40

Project Number : ROB01.001-QM

Sample : MW-3

Matrix : Water

Lab Number : 47227-03

Sample Date : 11/30/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Methyl-t-butyl ether (MTBE)	3.8	0.50	ug/L	EPA 8260B	12/6/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/6/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/6/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	12/6/2005
4-Bromofluorobenzene (Surr)	96.2		% Recovery	EPA 8260B	12/6/2005
Dibromofluoromethane (Surr)	101		% Recovery	EPA 8260B	12/6/2005
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	12/6/2005

Approved By:  Joel Kiff



Report Number : 47227

Date : 12/7/2005

Project Name : Rotten Robbie Station #40

Project Number : ROB01.001-QM

Sample : MW-4

Matrix : Water

Lab Number : 47227-04

Sample Date : 11/30/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Methyl-t-butyl ether (MTBE)	5.1	0.50	ug/L	EPA 8260B	12/6/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/6/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/6/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	12/6/2005
4-Bromofluorobenzene (Surr)	93.7		% Recovery	EPA 8260B	12/6/2005
Dibromofluoromethane (Surr)	98.9		% Recovery	EPA 8260B	12/6/2005
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	12/6/2005

Approved By: Joel Kiff



Report Number : 47227

Date : 12/7/2005

Project Name : Rotten Robbie Station #40

Project Number : ROB01.001-QM

Sample : MW-5

Matrix : Water

Lab Number : 47227-05

Sample Date : 11/30/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	800	1.5	ug/L	EPA 8260B	12/6/2005
Toluene	5.5	1.5	ug/L	EPA 8260B	12/6/2005
Ethylbenzene	57	1.5	ug/L	EPA 8260B	12/6/2005
Total Xylenes	20	1.5	ug/L	EPA 8260B	12/6/2005
Methyl-t-butyl ether (MTBE)	120	1.5	ug/L	EPA 8260B	12/6/2005
Diisopropyl ether (DIPE)	< 1.5	1.5	ug/L	EPA 8260B	12/6/2005
Ethyl-t-butyl ether (ETBE)	< 1.5	1.5	ug/L	EPA 8260B	12/6/2005
Tert-amyl methyl ether (TAME)	< 1.5	1.5	ug/L	EPA 8260B	12/6/2005
Tert-Butanol	680	7.0	ug/L	EPA 8260B	12/6/2005
TPH as Gasoline	3000	150	ug/L	EPA 8260B	12/6/2005
1,2-Dichloroethane	< 1.5	1.5	ug/L	EPA 8260B	12/6/2005
1,2-Dibromoethane	< 1.5	1.5	ug/L	EPA 8260B	12/6/2005
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	12/6/2005
4-Bromofluorobenzene (Surr)	96.8		% Recovery	EPA 8260B	12/6/2005
Dibromofluoromethane (Surr)	99.3		% Recovery	EPA 8260B	12/6/2005
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	12/6/2005

Approved By: 
Joel Kiff



Report Number : 47227

Date : 12/7/2005

Project Name : Rotten Robbie Station #40

Project Number : ROB01.001-QM

Sample : MW-6

Matrix : Water

Lab Number : 47227-06

Sample Date : 11/30/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	14	0.50	ug/L	EPA 8260B	12/6/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Methyl-t-butyl ether (MTBE)	13	0.50	ug/L	EPA 8260B	12/6/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Tert-Butanol	9.7	5.0	ug/L	EPA 8260B	12/6/2005
TPH as Gasoline	100	50	ug/L	EPA 8260B	12/6/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	12/6/2005
4-Bromofluorobenzene (Surr)	95.8		% Recovery	EPA 8260B	12/6/2005
Dibromofluoromethane (Surr)	99.5		% Recovery	EPA 8260B	12/6/2005
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	12/6/2005

Approved By:  Joel Kiff



Report Number : 47227

Date : 12/7/2005

Project Name : Rotten Robbie Station #40

Project Number : ROB01.001-QM

Sample : MW-8

Matrix : Water

Lab Number : 47227-07

Sample Date : 11/30/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Methyl-t-butyl ether (MTBE)	0.51	0.50	ug/L	EPA 8260B	12/6/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/6/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/6/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	12/6/2005
4-Bromofluorobenzene (Surr)	95.7		% Recovery	EPA 8260B	12/6/2005
Dibromofluoromethane (Surr)	100		% Recovery	EPA 8260B	12/6/2005
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	12/6/2005

Approved By:  Joel Kiff

QC Report : Method Blank Data
Project Name : Rotten Robbie Station #40
Project Number : ROB01.001-QM

Report Number : 472227
 Date : 12/7/2005

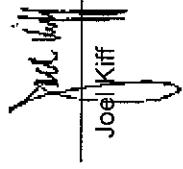
Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed	Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/5/2005						
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/5/2005						
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/5/2005						
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/5/2005						
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/5/2005						
Diisopropyl ether (DPE)	< 0.50	0.50	ug/L	EPA 8260B	12/5/2005						
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/5/2005						
Tert-amy1 methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/5/2005						
Ter-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/5/2005						
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/5/2005						
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/5/2005						
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/5/2005						
Toluene - d8 (Sur)	100		%	EPA 8260B	12/5/2005						
4-Bromofluorobenzene (Sur)	95.8		%	EPA 8260B	12/5/2005						
Dibromofluoromethane (Sur)	98.2		%	EPA 8260B	12/5/2005						
1,2-Dichloroethane-d4 (Sur)	102		%	EPA 8260B	12/5/2005						
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005						
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005						
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005						
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005						
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005						
Diisopropyl ether (DPE)	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005						
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005						
Tert-amy1 methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005						
Ter-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/6/2005						
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/6/2005						
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005						
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/6/2005						
Toluene - d8 (Sur)	97.6		%	EPA 8260B	12/6/2005						
4-Bromofluorobenzene (Sur)	99.8		%	EPA 8260B	12/6/2005						
Dibromofluoromethane (Sur)	103		%	EPA 8260B	12/6/2005						
1,2-Dichloroethane-d4 (Sur)	98.1		%	EPA 8260B	12/6/2005						

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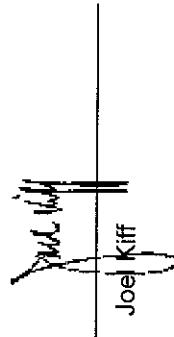
Approved By:

Joe Kiff



Project Name : Rotten Robbie Station #40
Project Number : ROB01.001-QM

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Spiked Sample Percent Recov.	Spiked Sample Percent Recov.	Relative Percent Diff.
Benzene	47236-01	<0.50	36.6	36.6	39.3	39.6	ug/L	EPA 8260B	12/6/05	107	108	0.744	70-130	25
Toluene	47236-01	<0.50	36.6	36.6	38.8	39.1	ug/L	EPA 8260B	12/6/05	106	107	0.793	70-130	25
Tert-Butanol	47236-01	<5.0	183	183	192	191	ug/L	EPA 8260B	12/6/05	105	104	0.342	70-130	25
Methyl-t-Butyl Ether	47236-01	<0.50	36.6	36.6	36.8	39.8	ug/L	EPA 8260B	12/6/05	100	109	7.81	70-130	25
Benzene	47206-02	<0.50	39.1	39.0	40.0	39.1	ug/L	EPA 8260B	12/6/05	102	100	1.95	70-130	25
Toluene	47206-02	<0.50	39.1	39.0	38.5	37.3	ug/L	EPA 8260B	12/6/05	98.6	95.7	3.07	70-130	25
Tert-Butanol	47206-02	<5.0	195	195	210	204	ug/L	EPA 8260B	12/6/05	108	104	3.00	70-130	25
Methyl-t-Butyl Ether	47206-02	<0.50	39.1	39.0	39.0	38.4	ug/L	EPA 8260B	12/6/05	99.8	98.6	1.22	70-130	25



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Project Name : Rotten Robbie Station #40

Project Number : ROB01.001-QM

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov.
Benzene	40.0	ug/L	EPA 8260B	12/5/05	107	70-130
Toluene	40.0	ug/L	EPA 8260B	12/5/05	106	70-130
Ter-Butanol	200	ug/L	EPA 8260B	12/5/05	100	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	12/5/05	109	70-130
Benzene	40.0	ug/L	EPA 8260B	12/6/05	101	70-130
Toluene	40.0	ug/L	EPA 8260B	12/6/05	97.5	70-130
Ter-Butanol	200	ug/L	EPA 8260B	12/6/05	106	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	12/6/05	99.3	70-130

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